In the Claims:

Please cancel Claims 11, 12, and 14-27 and amend Claims 1-8 and 13, as follows:

1. (Amended) A method for identifying in a nematode having a developing gonadal cell a modulator of an activity of a protein for directing migration of the gonadal cell, wherein the protein comprises a metalloprotease domain and a thrombospondin domain, the nematode being selected from the group consisting of *C. elegans* and *C. briggsae*, the method comprising the steps of:

treating the nematode with at least one potential modulator of gonadal cell migration; and

observing in the treated nematode a change in migration or shape of the developing gonadal cell attributable to the presence of the at least one potential modulator, wherein a change in the migration or shape of the developing gonadal cell results in the identification of the modulator.

2. (Amended) A method as claimed in Claim 1 wherein migration of the developing gonadal cell in the nematode before treatment is absent or reduced relative to a wild type individual.

3. (Amended) A method as claimed in Claim 1 wherein the treating step restores or enhances migration in the nematode relative to migration before the treating step.

4. (Amended) A method as claimed in Claim 1 wherein migration of the developing gonadal cell in the nematode before treatment is at a level of a wild type individual.

5. (Amended) A method as claimed in Claim 1 wherein the treating step reduces migration in the nematode relative to migration before the treating step.

6. (Amended) A method as claimed in Claim 1, the protein being selected from the group consisting of a protein encoded by a native polynucleotide sequence, a protein encoded by a heterologous polynucleotide sequence introduced into the nematode, a protein that shares at least 20% amino acid sequence identity in the metalloprotease and thrombospondin domains with either of the foregoing, and a chimeric protein introduced into the nematode, the polynucleotide sequence being under transcriptional control of a promoter active in a tissue located sufficiently close to the developing gonadal cell so as to signal the cell to migrate.

7. (Amended) A method as claimed in Claim 6, wherein the native polynucleotide sequence is *C. elegans gon-1*.

8. (Amended) A method as claimed in Claim 6, wherein the heterologous polynucleotide sequence is a homolog of *C. elegans gon-1*.

9. A method as claimed in Claim 8 wherein the homolog of *C. elegans gon-1* encodes a metalloprotease enzyme selected from the group consisting of murine ADAMTS-1 protein, bovine procollagen-1 N-proteinase, and human aggrecan-degrading metalloprotease.

10. A method as claimed in Claim 6 wherein the protein is truncated relative to a protein in a wild type individual.

13. (Amended) A method as claimed in Claim 1 wherein the at least one modulator is selected from the group consisting of a nucleic acid molecule, a protein molecule, a sugar, a lipid, an organic molecule, a synthetic or natural pharmaceutical agent, and a mixture thereof.

In the Sequence Listing:

Please cancel the Sequence Listing in its entirety and replace it with the attached Sequence Listing.